Commonwealth Green IT Standards and Practices
Commonwealth Office of Technology

Technology Category: Printing and Output Devices	**Sub Category:** Office System Printers and Multi Function Devices

Responsible COT Organization/Person: COT Desktop Support
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Standards and Recommendations by Lifecycle

Procurement and Contracting:
- At a minimum, all printers leased or purchased by Executive Branch agencies shall be Energy Star Compliant. For additional information regarding Energy Star compliance see: http://www.energystar.gov/

- Where feasible, agencies shall purchase high-yield toner cartridges and if the printer is a Lexmark brand, take part in the Lexmark Cartridge Return program.

Note: The standard Lexmark configurations recommended by the Commonwealth Office of Technology are Energy Star compliant.

Configuration and Deployment:
- System administrators should ensure that the Energy Star features are enabled on all current and future equipment.

- The default printer mode shall be set at double-sided on all output devices.

- The default on color output devices should be set to monochrome on devices that can feasibly print monochrome.

Operations and Administration:
- As funding allows, each agency should move to shared printing services through a Printer or Multi Function Device (MFD) that provides printing, copying, scanning and faxing through a single device. The use of a single MFD can result in a cost savings of 150% compared to supporting, maintaining and powering several single function devices. All outdated and displaced equipment should be disconnected from power outlets and should be transported to the Division of Surplus Property for recycling/disposal.

- Printer defaults shall be set to **draft quality** for everyday use internally by state employees and **near letter quality** shall be reserved for use for leadership offices or work environments that produce documents for use by citizens, business or other government (federal, etc.) entities outside the Commonwealth work environment.

- Commonwealth IT and desktop management organizations shall stay abreast of the latest Green IT industry standards and business practices and incorporate the latest proven tools/practices into the daily management of agency scanning, printing and output devices.

Usage and User Practices:
- Staff should be encouraged to print documents only when necessary and minimize the use of color printing.

- Large organization should consider the purchase and use of a **Document Management Facility** (MS SharePoint or Xerox Docushare) to provide shared access (browser enabled) to needed documents/information and eliminate the need for each organization/staff person to have an individual hardcopy.

- Agency staff participation in the efficient use of scanning and output devices is critical. On-going training and refresher sessions on the following topics are recommended:
  o How to print only specific pages in a document
  o How to select paper size and print orientation
  o How to print only selected areas in a spreadsheet
  o How to use the "print preview" function

- Lexmark offers printer fleet "right sizing" consulting services free of charge. The vendor deliverable includes a detailed plan to update printing environments across an agency to promote efficiency and save costs.

- Additional enterprise standards regarding printing are available for review at:
  http://www.gotsource.ky.gov/docushare/dsweb/Get/Document-278424/CIO-086%20-%20State%20Agency%20Local%20Print.doc

Consumables:
- When feasible, purchase Lexmark remanufactured toner cartridges. Switching from disposable to remanufactured cartridges can save natural resources and agency costs by reusing components rather than disposing of them after one use.

- When a toner cartridge is empty, return the cartridge to the vendor for recycling or refilling.

- Agencies shall purchase extra high-yield toner cartridges and if the printer is a Lexmark brand, take part in the Lexmark Cartridge Return program.

- The use of a Lexmark remanufactured toner cartridge does not void the warranty for Lexmark printers. Remanufactured toner cartridges are available from the Lexmark printer/MFP contract currently held by Pomeroy.

Energy Utilization and Efficiency: Of the total carbon footprint associated with the operation of a printer/MFD, paper accounts for over 75% of the total. Agencies shall routinely purchase and use recycled

paper for printers and copiers.

End-of-Life Recycling & Disposal:

Purchased Equipment – All Executive Branch end-of-life electronic equipment shall be documented as surplus and transported to the Division of Surplus Properties per established procedures issued by the Finance and Administration Cabinet. An eScrap contract has been established with a third party vendor to recycle all end-of-life computers, copiers/printers, components and cables in an environmentally responsible manner.

Future Direction:
- Lexmark will soon release a color printer that is engineered to provide standard black and white printing at the same cost as conventional black and white printer but it will also have the capabilities to print color on demand. This new offering may eliminate the need to purchase and support two different printers.

- Lexmark also offers added functionality to control print output, allowing users to send documents for printing but they must key in a PIN number or Password before the document is created by the print device.

Related References Links:
- For information regarding Energy Star compliance see: http://www.energystar.gov/
- For additional standards and practices for printing see: http://www.gotsource.ky.gov/docushare/dsweb/Get/Document-278424/CIO-086%20-%20State%20Agency%20Local%20Print.doc
- For more information on the Commonwealth's requirements regarding recycled paper see: http://www.lrc.state.ky.us/kar/200/005/330.htm

Comments and Constraints: